Alternative Fuel and Advanced Vehicle Incentives





Clean Cities Webinar Monday, March 18, 2013

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Clean Cities Technical Response Service

Overview



- Alternative Fuels Data Center (AFDC) Laws & Incentives Database
- Federal Incentives
- State Incentive Trends and Examples
- Questions

AFDC Laws & Incentives Database



http://www.afdc.energy.gov/laws/

- Searchable, online database of state and federal laws, incentives, and regulations
 - Utility and private incentives included at the state level
- Topics covered: alternative fuels, advanced vehicles, air quality, vehicle efficiency, idle reduction
- Additional features:
 - Summaries of key federal legislation (e.g., Energy Policy Acts)
 - Tables of laws and incentives sorted by technology or fuel, incentive or regulation, and user type
 - Examples of notable or common local laws and incentives

Data Collection Methodologies



- Maintained by NREL and ICF International
- State information
 - Updated annually after each state's legislative session ends and on an ad hoc basis
 - Sources:
 - State legislative and executive office website searches
 - Points of contact, including Clean Cities, state energy office, industry association, industry, and utility staff
 - Industry newsletters and other publications
- Federal information
 - Updated on an ad hoc basis when legislation is signed into law or when agency rules are issued, and on an annual basis
 - Quarterly legislative searches

Search Options

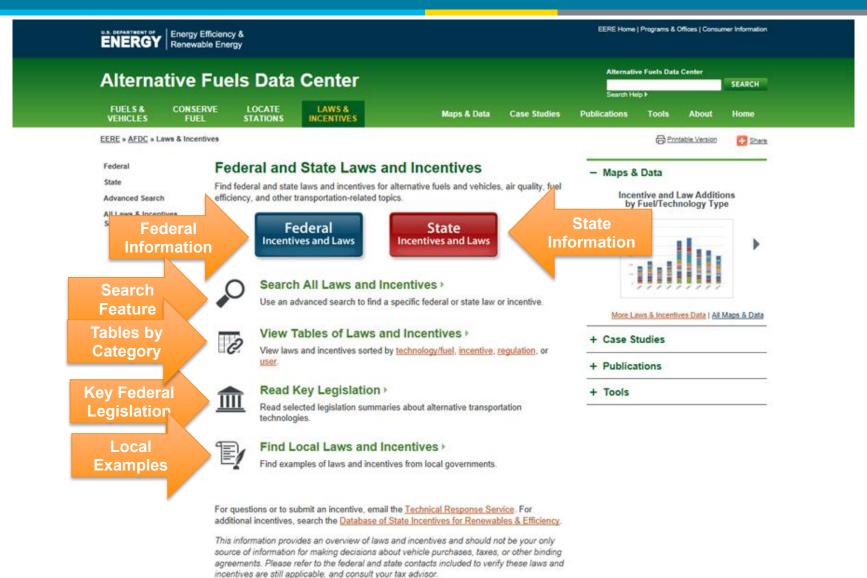


Technology and Fuel Types	Incentive Types	Law and Regulation Types	User Types
Biodiesel	Grants	Acquisition or fuel use	Vehicle owner or driver
Ethanol (E85, E10) or flexible fuel vehicles	Tax incentives (credits, deductions)	Driving or idling	Fleet purchaser or manager
Natural gas (CNG, LNG)	Loans or leases	Registration or licensing	Fueling or TSE infrastructure owner
Propane (LPG)	Rebates	Fuel taxes	Alternative fuel producer
Hydrogen or fuel cell vehicles	Exemptions	Fuel production or quality	Alternative fuel dealer
Electricity, PEVs, HEVs, or NEVs	Other (e.g., technical assistance)	Renewable fuel standard or mandate	Alternative fuel purchaser
Aftermarket conversions		Air quality or emissions	AFV manufacturer or retrofitter
Fuel economy or efficiency		Climate change or energy initiatives	
Idle reduction		Other (e.g., definitions)	

AFDC Laws & Incentives Database

ABOUT THE DATA





Example Description



Hybrid Electric Vehicle (HEV) High Occupancy Vehicle (HOV) Lane Exemption

The Colorado Department of Transportation (CDOT) allows HEVs to travel in HOV and high occupancy toll (HOT) lanes. Qualifying vehicles must obtain a permit and display an HOV expension of the property of the property of the HOT (HOT) lanes. Qualifying vehicles and only of the property of the HOT (HOT) lanes. Qualifying vehicles and only of the property of the HOT (HOT) lanes. Qualifying vehicles and of the HOT (HOT) lanes are property of the HOT (HOT) lanes. Qualifying vehicles and of the HOT (HOT) lanes. Qualifying vehicles are property of the HOT (HOT) lan

Point of Contact

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http://www.coloradodot.info/programs/hybrids

Point of Contact

Coming Soon



- Fact sheets outlining trends and updates
- Case studies on specific incentives and programs
- Additional content?

Federal Incentives – "Fiscal Cliff"



- H.R. 8, the American Taxpayer Relief Act of 2012
- Retroactively extended several fuel and infrastructure tax credits
- Expanded the definition of second generation biofuel and extended two incentives related to these fuels
- Introduced a credit for eligible two- and three-wheeled plug-in electric drive vehicles
- Extended discretionary funding for U.S. Department of Agriculture programs

Federal Tax Credits – Fuel



Tax Credit	Amount	Fuel Types Included	IRS Publications/ Forms	Expires
Alternative Fuel and Mixture Excise	\$0.50/ gallon	CNG, LNG, propane (including fuel used in mixtures)	Publication 510; Forms 637, 720, 4136, and 8849	December 31, 2013
Biodiesel Income	\$1.00/ gallon	B100 (biodiesel, agri-biodiesel, renewable diesel)	Publication 510; Forms 637 and 8864	December 31, 2013
Biodiesel Mixture Excise	\$1.00/ gallon	Biodiesel, agribiodiesel, and renewable diesel used in mixtures	Publication 510; Forms 637, 720, 4136, 8849, and 8864	December 31, 2013

Federal Tax Credits – Fuel



Tax Credit	Amount	Fuel Types Included	IRS Publications/ Forms	Expires
Hydrogen Fuel Excise	\$0.50/ gallon	Liquefied hydrogen (including fuel used in mixtures)	Publication 510; Forms 637, 720, 4136, and 8849	September 30, 2014
Second Generation Biofuel Producer	\$1.01/ gallon	Liquid fuel produced from any lignocellulosic or hemicellulosic matter that is available on a renewable basis or any cultivated algae, cyanobacteria, or lemna	Publication 510; Forms 637 and 6478	December 31, 2013

Federal Tax Credit – Infrastructure



Tax Credit	Amount	Fuel Types Included	IRS Publications/ Forms	Expires
Alternative Fuel Infrastructure	30% of the cost, not to exceed \$30,000 Residential: Up to \$1,000	CNG, LNG, propane, electricity (EVSE), E85, B20+	Form 8911	December 31, 2013

Federal Tax Credits – Vehicles



Tax Credit	Amount	Fuel Types/ Vehicles Included	IRS Publications/ Forms	Expires
Plug-In Electric Drive	\$2,500 - \$7,500, based on battery capacity and GVWR	Up to 14,000 lbs GVWR (Light-duty and medium- duty) PEVs	Form 8936	Phased out when manufacturer sells 200,000 PEVs
Two- and Three- Wheeled Plug-In Electric Drive	10% of the cost, up to \$2,500	Up to 14,000 lbs GVWR (Light-duty and medium- duty) PEVs	Form 8936	December 31, 2013
Fuel Cell	Up to \$4,000	Light-duty, medium-duty, and heavy- duty FCVs	Notice 2008-33; Form 8910	December 31, 2014

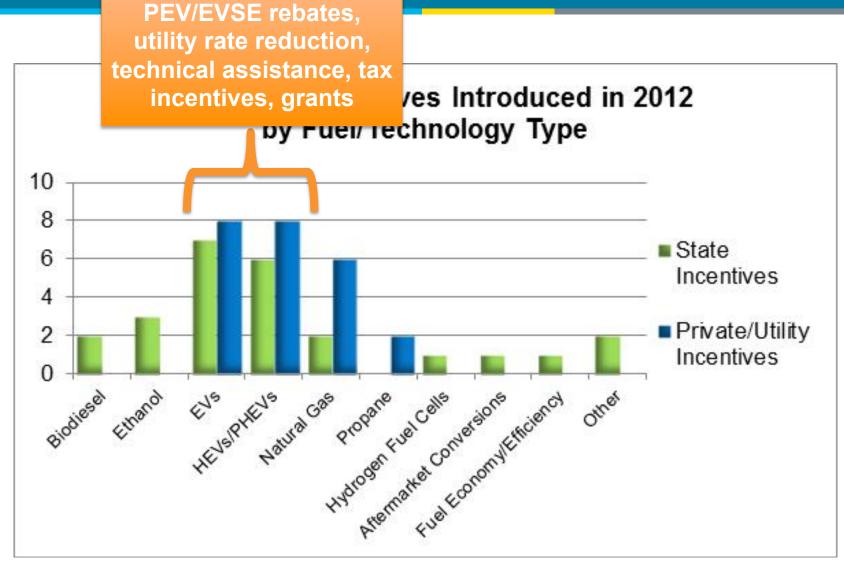
Other Federal Incentives



- U.S. Department of Transportation
 - Congestion Mitigation and Air Quality (CMAQ) Improvement
 - Airport programs
- U.S. Department of Agriculture
 - Advanced biofuel production
 - Education; research & development programs
 - Ethanol infrastructure program in rural areas
- U.S. Environmental Protection Agency
 - National Clean Diesel Campaign
- U.S. Department of Energy
 - Clean Cities

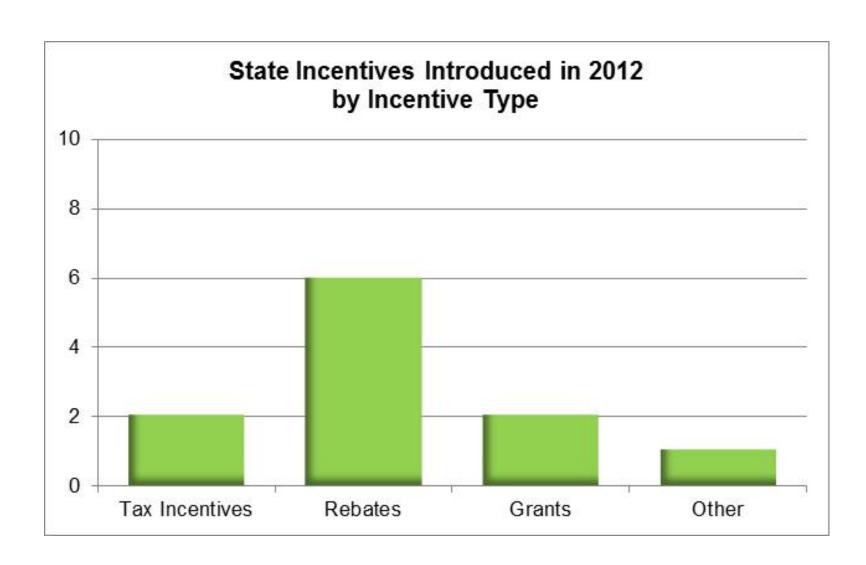
2012 State-Level Trends





2012 State-Level Trends



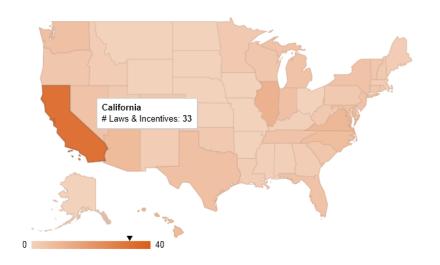


State-Level Maps and Graphs

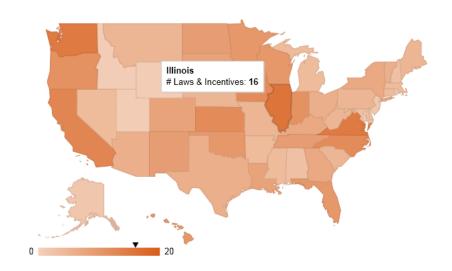


http://www.afdc.energy.gov/data/

PEV Incentives & Laws by State



Ethanol Incentives & Laws by State



State Incentive Examples



Vehicle/infrastructure tax Incentives

- Credits (NY \$0.15/gallon biofuel production credit)
- Exemptions (NJ ZEV sales and use tax exemption)
- Refunds (NE natural gas/propane tax refund for buses)
- Deductions (IA \$2,000 fuel cell vehicle deduction)

Exemptions

- Idle reduction equipment weight (AL up to 400 lbs)
- Parking (AZ AFVs may park in carpool areas)
- HOV lane (CA AFVs may drive in HOV/HOT lanes)
- Registration fee (DC reduced fee for fuel-efficient vehicles)
- Emissions testing requirements (MI AFVs exempt)

State Incentive Examples



Grants

- Vehicle Purchases (CO 80% of the cost of PEVs for agencies/non-profits)
- Vehicle Research and Development (IN AFV and fuelefficient vehicle production projects)
- Infrastructure (IL up to \$30,000 per facility for E85 fueling)
- Education (KY up to \$2,000 for biodiesel education programs at schools)
- Production (MN up to \$500,000 for research, technical assistance, or equipment at a cellulosic ethanol production facility)

Rebates

- Vehicle (CA up to \$2,500 for light-duty ZEV or PEV)
- Infrastructure (IL up to \$7,500 for Level 2 EVSE)

State Incentive Examples



Loans & Leases

- Idle Reduction (AR up to \$45,000 at 80% of prime for large businesses)
- Vehicle/Infrastructure (OK 0% interest loans for government fleets)
- Production (IA forgivable and low-interest loans for businesses)

Other

- Utility Rate Incentives (VA Virginia Dominion PEV rate pricing plans)
- Technical Assistance (NY vehicle and infrastructure assistance for fleets)
- Training (TX propane safety and maintenance training)



Questions, updates, or suggestions for the database?

Contact: <u>TechnicalResponse@icfi.com</u> 800-254-6735

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